Technical Branch Science & Engineering Group Para-Professional Engineering Series

## **ENVIRONMENTAL ENGINEERING TECHNICIAN I**

05/98 (TLW)

## Summary

Under general supervision, direct and carry out technical support functions associated with the Storm Water Management Program.

## Typical Duties

Monitor and inspect construction sites, and other designated and random sites for storm water environmental compliance. Involves: collecting storm water samples; setting up and calibrating instruments used to take samples or monitoring of system operations; maintaining scientific equipment used in field monitoring; conducting scheduled and random inspections of sites during various phases of construction for conformance to federal and city regulations and monitor environmental impact such as erosion, grading or drainage control, identify problems and recommend solutions; identifying hazardous material or illicit discharges into arroyos, drainage channels or storm sewers and locate origin; preparing required reports for federal and state agencies; responding to hazardous materials spills to determine environmental impact on the municipal separate storm sewer system; issuing Class "C" citations and testifying in court regarding contested violations; calculating cost estimates; advising contractors and other city departments on compliance regulations.

Review plans, drawings and calculations for completeness, accuracy and storm water environmental related compliance with required ordinances and other related codes. Involves: examining individual plan components to ensure that code mandated items are included; verifying that plans and drawings drawn to scale and depict character of work with sufficient clarity and detail and to determine conformance to technical code and ordinance requirements; noting instances of noncompliance on plans and correction sheet and suggesting modifications to bring plans into compliance; submitting reports detailing items of noncompliance for correction; analyzing completed project deficiencies such as line breaks, drainage problems to develop correction plans; discussing construction and plan discrepancies with contractors, engineers, architects and the general public; resolving minor disputes.

Supervise technical and clerical support staff as assigned. Involves: scheduling, assigning, instructing, guiding, checking and evaluating work; arranging for or engaging in employee training and development; enforcing personnel rules and regulations, standards of conduct, work attendance, and safe work practices; counseling, motivating and maintaining harmonious working relationships among subordinates; recommending staffing and employee status changes; interviewing applicants.

Perform other duties as required. Involves: preparing recurring and ad hoc reports and maintaining permits and activity records; answering inquiries regarding environmental protection regulations and education; researching and reporting information for use by engineers in proposed new and changed ordinances and manuals which includes drafting specified text as instructed.

## Minimum Qualifications

<u>Training and Experience</u>: Completion of an Associate's Degree in Engineering Technology, Drafting Technology or related field and four (4) years of increasingly responsible para-professional engineering experience; or an equivalent combination of training and experience.

<u>Knowledge</u>, <u>Abilities and Skills</u>: Considerable knowledge of: engineering design principles, techniques and methods; statistics and cost estimation methods; environmental and safety record keeping requirements. Good knowledge of: mathematics related to engineering; water sampling techniques; monitoring instruments and sampling equipment; safety procedures and practices. Some knowledge of: Federal, State, and Local environmental protection laws and regulations.

Ability to: interpret, apply and explain rules, regulations, policies and procedures; apply sampling techniques; set up and calibrate sampling instruments; record sampling and other related data; interpret surveying data, plans, drawings, specifications, and relate to applicable codes and regulations; identify variances from plan specifications to resolve problems and minor disputes regarding discrepancies between designs and construction; respond to complaints and general inquiries; enforce codes with firmness, tact and impartiality; express oneself clearly and concisely, both orally and in writing such as when communicating safety and environmental concerns and compliance requirements to all levels of management, contractors and employees; maintain effective working relationships with fellow employees, the general public and contractor personnel.

Skill in the safe operation and care of: personal computer or network work station, including Computerized Automated Design Drafting, word processing, spreadsheets and database software; motor vehicle through city traffic.

*Physical Requirements:* Occasional: exposure to adverse weather conditions and to construction site environment; hazardous materials when responding to alleged spills; lift and carry equipment (up to 50 lbs).

Special Requirements: Subject to call back, and working flexible hours, weekends, holidays and mandatory overtime, as required.

Licenses and Certificates: Texas Class "C" Driver's License or equivalent from another State.

